



COURTESY OF ALEX TRAN

Kyiv mayor Vitali Klitschko and his brother Wladimir Klitschko speak to the press at the Madrid Summit about Ukraine, calling on NATO to take action against Russia.

Ukraine makes surprise appearance at Madrid NATO Summit

Klitschko Brothers call for 'whatever it takes' to stop Russia

By Selena Zhang
and Daniel Wu

Kyiv mayor Vitali Klitschko and his brother Wladimir Klitschko made an unannounced appearance Tuesday evening at the NATO Summit in Madrid.

Wladimir Klitschko criticized NATO for deflecting from the war in Ukraine: "Part of this NATO conference is climate. You cannot imagine what is going on with the modern nation in Ukraine. Nobody cares about anything like that in Ukraine during the war. We don't have COVID. We don't have any rules in Ukraine but only one rule: the broken law of war."

The Klitschko brothers' appearance comes on the heels of the opening Public Forum, in which NATO Secretary General Jens Stoltenberg labeled climate change as the "defining challenge of our time."

Klitschko responded that "priority and unity around Ukraine" is the "key for peace back in Europe."

He outlined the threat to NATO with certainty, saying "Wake up guys! This is happening now. You're gonna be next. This is gonna be knocking on your door, just in the blink of an eye. As Russian propaganda already announced, 'we will continue rolling on.'"

Klitschko warned that Russia's actions could be a slippery slope and that "Russia's going to launch something new." He proceeded to say that "for real, the next world war is going to happen eventually. So let's stop it in Ukraine." He indicated NATO's response would send a broader signal: "There is international law. It needs to be respect[ed]."

Klitschko asked member states to fight with "whatever it takes," and said that Russia "needs to be

stopped now" whether it takes troops, defensive weapons, or offensive weapons.

Although expected to announce a significant wave of aid in the Comprehensive Assistance Package to Ukraine, NATO has been wary of taking direct action against Russia and instigating a larger war. In particular, Zelenskyy has been calling for NATO to impose a no-fly zone over Ukraine since near the start of the war, but NATO officials have demurred on taking concrete action.

Klitschko's comments follow the G7 statement released June 27 affirming that the leaders of the G7 will "stand with Ukraine for as long as it takes."

Editor's note: All quotes in this article from the Klitschko Brothers' appearance are attributed to Wladimir Klitschko, though both brothers did speak to the press.

IN SHORT

The last day to petition to take **August or September ASEs** is **July 14**.

MIT **personal certificates** expire **July 30**.

The **last day of classes** for Summer Session is **Aug 12**.

Interested in **joining The Tech**? Email join@tech.mit.edu.

Send news and tips to news@tech.mit.edu.

Finland, Sweden, and Türkiye sign NATO membership Agreement

Stoltenberg: This memorandum is 'exactly the opposite' of what Putin wanted

By Selena Zhang and Daniel Wu

The foreign ministers of Türkiye, Finland, and Sweden have signed an agreement on the entry of the latter two countries into NATO, Secretary General Jens Stoltenberg announced in an impromptu press conference

Tuesday.

Stoltenberg called NATO's open door policy "a historic success" and stated that "we are demonstrating that NATO's doors are open, NATO's doors are open."

NATO Membership, Page 2

XKCD

The Universe by Scientific Field.
FUN PAGES, p. 6

NUCLEAR POWERS SPACE EXPLORATION

How we can return to space economically and efficiently.
SCIENCE, p. 5



LICK IT GOOD

Nothing is better than summer and ice cream.
ARTS, p. 4

2022 STRATEGIC CONCEPT

NATO aims to increase strength and unification.
WORLD AND NATION, p. 3

SECTIONS

World & Nation . . . 1
Arts . . . 4
Science . . . 5
Fun Pages . . . 6

The forum focused on climate change, but simultaneously stressed unity under threat of Russian aggression

NATO Secretary General Jens Stoltenberg declared “Climate change is a defining challenge of our time” at the opening public forum of NATO’s 2022 Summit in Madrid.

Stoltenberg named NATO's first emissions targets, aiming for net zero by 2050. NATO civilian and military authorities will gather to establish an energy transition plan to be announced next year.

As he laid out NATO's climate change agenda, Stoltenberg emphasized its link to the war in Ukraine. "If we fail to preserve peace we also fail to fight climate change," Stoltenberg said. He stated that "the war in Ukraine shows the danger of being too dependent on commodities from authoritarian regimes," and said that Russia used its oil and gas exports as a "weapon of coercion."

In his opening remarks, Stoltenberg stressed the need for unity under the threat of Russian aggression. He pointed out that “it is in our interest to support Ukraine,” and that “the world of NATO allies will be more insecure if Putin wins this war.”

To this end, NATO members plan to finalize the Comprehensive Assistance Package to Ukraine at this summit. This package will commit NATO to providing a sweeping set of military and civilian equipment and aid to support the Ukrainian fight against Russia.

In Madrid, NATO will update its Strategic Concept for the first time in over ten years. The Madrid Strategic Concept will underpin NATO initiatives for the next

Finland and Sweden are not currently NATO member states, but have been seeking membership following the Russian invasion of Ukraine. The two nations formally applied for membership mid-May.

Progress on Finland's and Sweden's NATO bids was a primary goal of this summit; the agenda emphasized that "as authoritarian regimes contest core principles for our security, the Alliance must work even more closely with like-minded countries and organizations."

According to NATO's Accession Protocol, the entry of a country into the alliance requires unanimous approval from all existing member states; Recep Tayyip Erdoğan, the President of Türkiye, had been vocal in his opposition to Finland and Sweden's entry to the association.

Türkiye's primary objection stemmed

decade, and is expected to be highly influenced by the war in Ukraine, Russian aggression in the Arctic, and Chinese expansion in the South China Sea.

This marks a shift from the last Strategic Concept, released in 2010. The previous Concept referred to Russia as a “strategic partner,” and made little reference to China and the Pacific. The Madrid Strategic Concept is expected to designate Russia as a security threat; NATO will also release a written policy on China for the first time.

Finland's and Sweden's applications to join NATO are also a primary point of



NATO Secretary General Jens Stoltenberg speaks at the opening public forum of the Madrid Summit.

from Finland's and Sweden's resistance to extraditing insurgent fighters from the Kurdistan's Worker's Party (PKK). While the US, EU, and Turkey list the PKK as a terrorist organization, several PKK affiliates were instrumental to the fight against ISIS, and are not considered terrorist groups.

On Tuesday evening, after weeks of talks, the three countries reached an agreement.

“Our foreign ministers signed a trilateral memorandum which confirms that Türkiye will, at the Madrid Summit this week, support the invitation of Finland and Sweden to become members of NATO,” Finnish President Sauli Niinistö said in a statement June 28.

"Our joint memorandum underscores the commitment of Finland, Sweden and Türkiye to extend their full support against threats to each other's security. Us becoming NATO allies will further strengthen this commitment," Niinistö added. Meanwhile, An-

discussion. World leaders will attempt to reach an accord with Türkiye, the primary opponent to the accession of these two countries.

This summit in Madrid marks the 40th anniversary of the accession of Spain into NATO, and immediately follows the G7 meeting from June 26-28.

World leaders from over 35 NATO member and affiliate nations are in attendance at this annual summit, which ends on June 30. The summit schedule can be found here (https://www.nato.int/cps/en/natohq/events_196720.htm).

kara announced that it “got what it wanted” from the talks.

Stoltenberg refrained from outlining the precise agreement the countries had come to on handling extradition requests, but reaffirmed NATO's declaration of PKK as a terrorist organization. "Finland and Sweden as NATO allies regard PKK as a terrorist organization," Stoltenberg stated. He added that "terrorism is something we have to fight in all its manifestations" and that the joint memorandum "reflects that reality."

Stoltenberg proclaimed that the memorandum is “exactly the opposite of what President Putin wanted.” With Sweden’s and Finland’s entries into NATO, the land border between Russia and NATO territories would more than double – from around 750 miles to approximately 1,600 miles. Since NATO forces can be freely deployed in NATO countries, this amounts to a significant increase in the pressure NATO may exert on Putin.

Things are getting pretty heated

A heat dome is building over the southern Plains as much of Oklahoma, Tennessee, and Missouri are expecting triple-digit temperatures for the end of the week. While the heat will worsen dry conditions in the West, it will interact with humid

balls and wind gusts up to 90 mph have already been reported, as we experience the trailing effects of the recent derecho that swept through South Dakota and Iowa earlier this week.

The combination of heat and humidity can be deadly, especially at this time of year. Try to stay indoors in cool places when possible. If you have the time, consider dropping by the beach to catch some of that refreshing sea breeze!

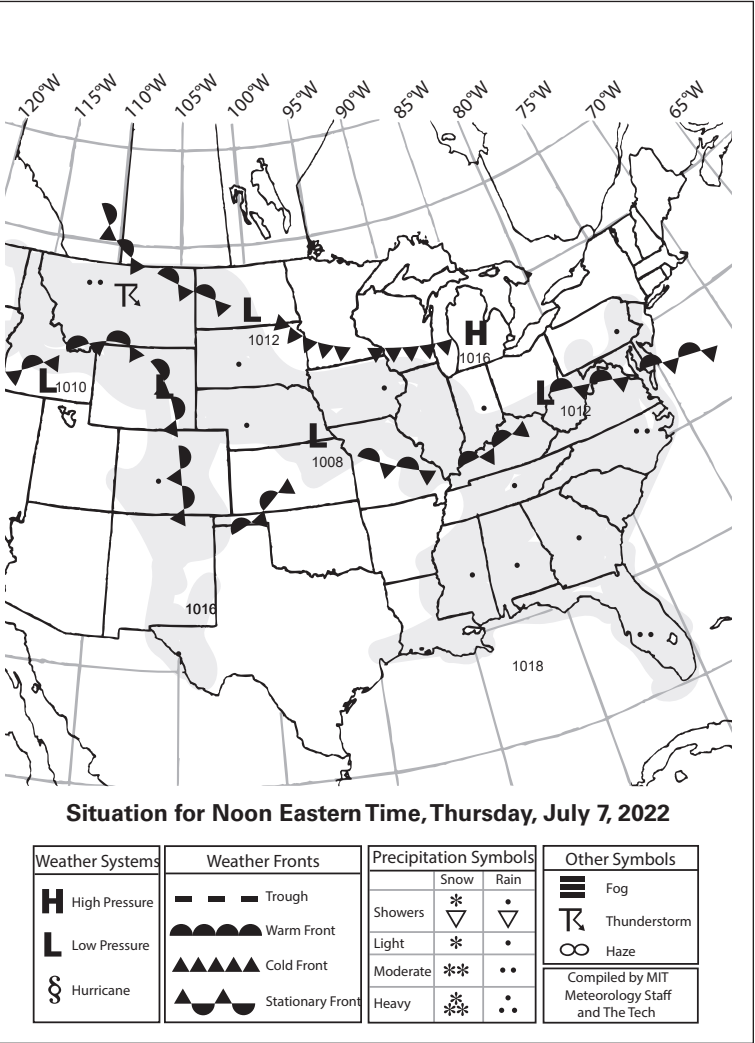
Today: Partly sunny. High around 77°F (25°C). East winds around 8-11 mph.

Tonight: Partly cloudy. Low around 63°F (17°C). South winds around 5-7 mph.

Friday: Chance showers. High around 83°F (28°C) and low around 66°F (19°C). Southwest winds around 9-12 mph.

Saturday: Mostly sunny. High around 79°F (26°C) and low around 57°F (14°C). North winds around 12-15 mph.

Sunday: Sunny. High around 78°F (26°C) and low around 56°F (13°C). North winds 8-11 mph.



Six MIT students share their thoughts on belonging, identity, love, and MIT itself

STAFF WRITER

Ultimately, *Our Ancestors Did Not Breathe This Air* is a fantastic exploration of identity and belonging. The authors manage to tackle difficult, often sensitive, subjects with uncommon wisdom and insight, making the anthology a pleasure to read.

J.P. Licks's new ice cream flavors are worth melting for

STAFF WRITER

J.P. Licks also released two vegan flavors, a sorbet and a dairy-free ice cream. The Sharkleberry Fin Kool-Aid sorbet features the more dominant Kool-Aid flavor with a subtle tropical twist of strawberry,

COURTESY OF DARREN DELUCA

The Sharkleberry Fin ice cream from J.P. Licks' new summer releases.



SCIENCE SCIENCE **SCIENCE** SCIENCE

By Codrin Paul Oneci

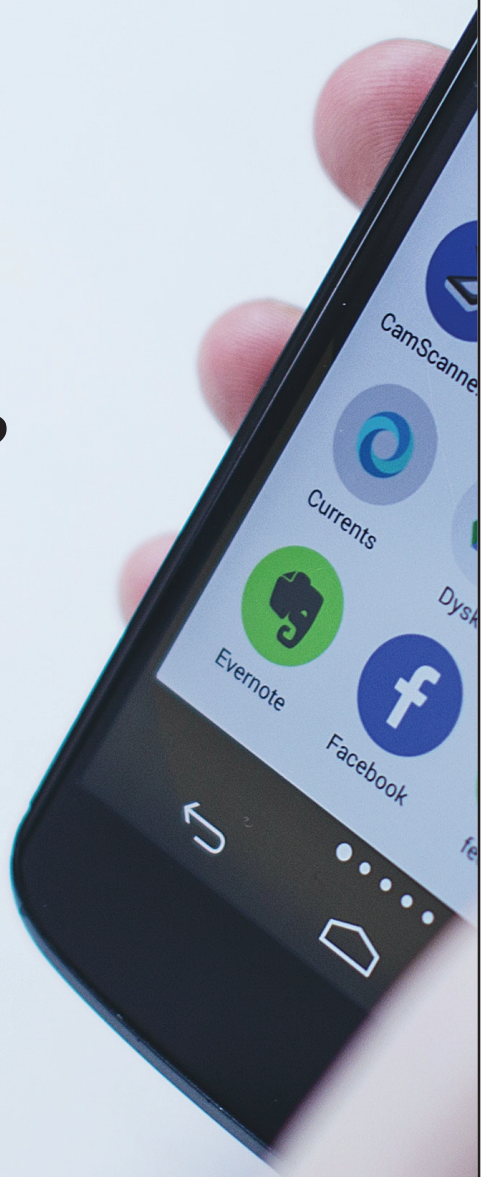
NTP is not a new technology: it was largely developed in the 1960s during the Space Race, culminating in the successful development of the Nuclear Engine for Rocket Vehicle Application (NERVA). The principle behind all NTP systems is the same: nuclear fission is used to heat helium or hydrogen to temperatures of about 2,200–2,800 Kelvin, accelerating these gases to produce thrust. In the case of NERVA, the design was similar to that of a miniaturized nuclear fission reactor, containing components made of graphite and beryllium oxide and a liquid hydrogen-based coolant in the rocket propellant. These atoms, which have a low atomic mass, are used in thermal propul-

The operating parameters and performance of NERVA are considered state-of-the-art even in modern-day designs and illustrate the benefits of nuclear propulsion over chemical rockets: more compact energy sources and higher particle exhaust velocities. While the large size of NTP sys-

Today, 50 years later, the landscape of space exploration is very different, as both China and Russia are willing to spend national resources to achieve strategic superiority in astronautics and the development of space systems, including preparation for the economic exploitation of space and resources in it. Economic competition over the last decade has also generated more interest in the field, and organizations and companies across both the U.S. and Europe have decided to invest more in it, with positive effects on the development, both physical and conceptual, of many technologies — including NTP.

Until we see NTP systems running in space, we may first witness the deployment of other nuclear technologies, like nuclear electric propulsion systems, which complement current work by NASA to miniaturize high-power nuclear systems for space missions. Using electromagnetic fields to accelerate ions, these systems produce less thrust than NERVA but are a step towards using nuclear technology in space and physically experimenting with propulsion systems that one day may be used on spacecraft heading to distant objects in the solar system. It is just a matter of time — and increasing economic competition between nations — until we will see such systems being used in transporting equipment and humans to Mars in order to make humanity a multiplanetary species.

join@tech.mit.edu



Vacation

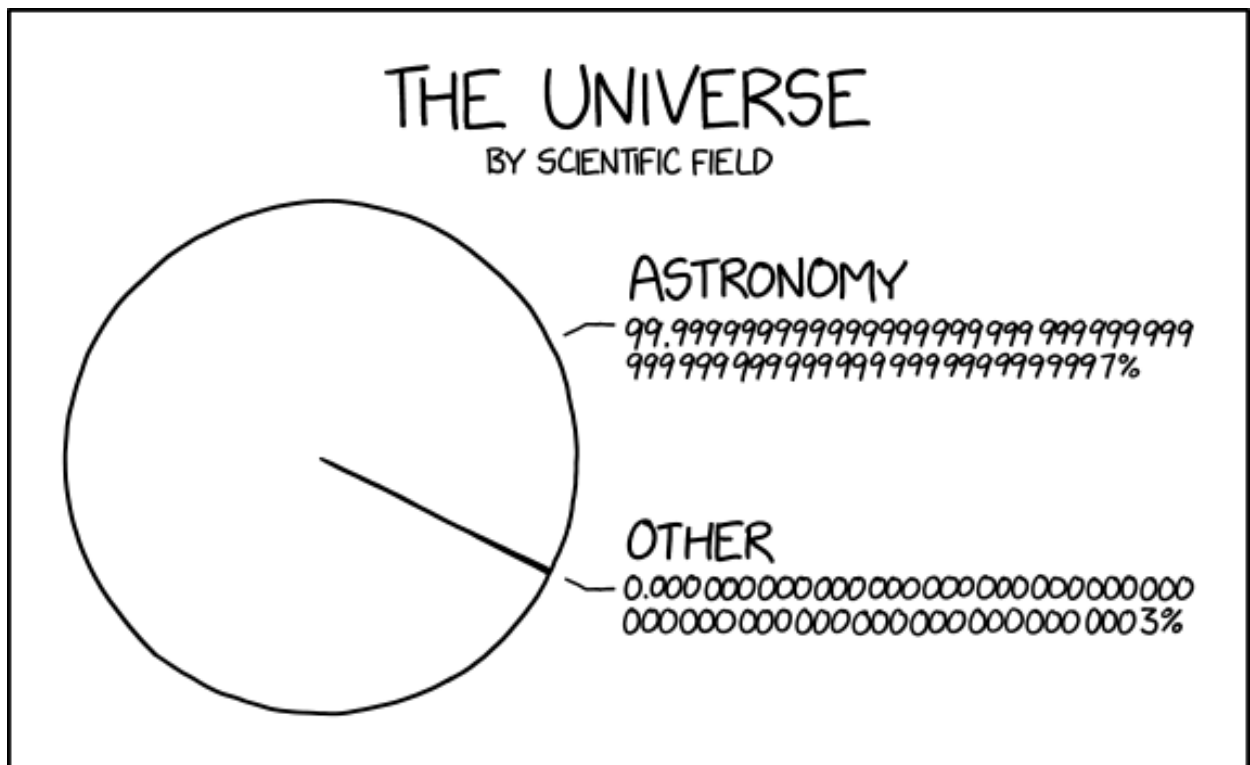
	8	3	9					2
6					8			9
	9				4			
9	1			3		8		4
		2				3		
3		7		8			6	1
			8				1	
1			5					8
7					6	2	4	

5					3		4	9
				8			2	
8	4		9	2		5		
						6	1	
7		1		6		2		5
	6	5						
		4		9	2		5	3
	7			5				
2	5		3					8

Final Charges by Mark McClain

1	2	3		4	5	6	7	8		9	10	11	12	13
14				15						16				
17				18					19					
20			21					22						
			23				24							
25	26	27				28	29					30	31	
32						33						34		35
36					37						38			
39				40						41				
	42		43					44						
			45					46						
	47	48					49	50				51	52	53
54						55						56		
57						58						59		
60						61						62		

[2640] The Universe by Scientific Field



the math and philosophy people also claim everything, but the astronomers argue that the stuff they study really only comprises a small number of paper surfaces.

